

Date: Sun, 2 Jan 94 17:02:48 PST  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V93 #1534  
To: Info-Hams

Info-Hams Digest                      Sun, 2 Jan 94                      Volume 93 : Issue 1534

Today's Topics:

                    ANS Bulletin 001.01  
                                cw waivers  
        Daily Summary of Solar Geophysical Activity for 01 January  
                Finally got my license in the mail!  
                TS-850 & ICOM SM-8  
        UK scanner listeners arrested; called  
                why 29.94 fps?

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: 2 Jan 94 21:02:34 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: ANS Bulletin 001.01  
To: info-hams@ucsd.edu

HR AMSAT NEWS SERVICE BULLETIN 001.01 FROM AMSAT HQ  
SILVER SPRING, MD January 1, 1994  
TO ALL RADIO AMATEURS BT  
BID: \$ANS-001.01

A number of messages have recently been posted to the AMSAT BBS  
concerning the schedules for the various satellites and how they  
are arrived at. In the case of OSCAR-13, the schedule is  
determined by the AO-13 Command Team consisting of James Miller  
G3RUH, Peter Guelzow DB20S and Graham Ratcliff VK5AGR. As to how  
these volunteers determine the schedule, a very fine set of

comments was posted by Paul Beckmann WA0RSE Internet address wa0rse@amsat.org. The AMSAT News Service thanks Paul for his well-put comments and has taken the liberty of extracting them for this bulletin.

Paul begins by asking himself: What determines the mode schedule for a satellite? He says thae he found an answer in the very clearly written piece in the 1993 Space Symposium Proceedings by, you guessed it, James, G3RUH.

In his attempt to put the article by James in terms that may not be obvious to new to satellites as well as many not so new "bird-watchers", Paul offers a list of some of the important considerations:

1. All modern satellites are battery-powered with solar cell recharging systems. In order to work, the batteries must stay charged.
2. Most satellites do not have solar cells covering their entire surface. This means the attitude of the satellite with relation to the sun must be managed to keep the batteries charged.
3. The antennas are fixed to the satellite, not steerable, and necessarily "go along for the ride" when accomplishing Item 2.)
4. Each mode involves a receiver, a transmitter, and a pair of antennas. The receivers vary in sensitivity, the transmitters in power, and the antennas in gain and beamwidth.
5. Because of Item 3, the characteristics of item 4 allow transponder operation only in particular modes, when the distances and spacecraft attitudes are within certain limits. For example, a narrowbeam antenna pointing away from the Earth will not support communications. If a particular mode requires the use of that antenna, it would not do any good to place the satellite in that mode, no matter how badly it was desired. To change the attitude of the spacecraft to point the antenna at the Earth could very well compromise solar cell illumination, hence battery charge, hence spacecraft operation - and possibly even its life expectancy.
6. Because some modes draw more power than others, the battery power must be budgeted. This also constrains how long the satellite can operate in any particular mode.

Paul admits to possibly missing some other major points, but he believes that these demonstrate to him, at least, that the mode schedule on AO-13, or any other bird, is not a self-serving

decision made by some "elite superclass" who treat the bird as a "toy", but are considered decisions, constrained by the physics of the orbit, solar cells, batteries, equipment aboard, antennas, etc., designed to offer the best long-term schedule of transponder operation and to further the state-of-the-art for the next birds' designs.

WA0RSE strongly suggests reading the article by James in the Proceedings. He says that he was amazed at the number of specialized programs that had been written, complete with graphical output, to aid in the decision-making process to keep the AO-13 satellite operational. He expressed his opinion that James, and others like him, should be thanked for bringing clear explanations like these to the rest of us and for fostering experimentation in modes that have proven to provide better two-way satellite communications for our fellow hams across the globe.

Paul sums up his message by saying that we need everyone interested in AMSAT, with their opinions, tempers, passions, talents, and good humor. He also wishes all a Happy New Year. Peace on Earth. Good will toward all.

Information on ordering a copy of the Space Symposium Proceedings, which contains James Miller's article can be found on page 12 of the Nov/Dec AMSAT Journal.

/EX

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Date: Sun, 02 Jan 94 12:20:51 EST  
From: usc!howland.reston.ans.net!europa.eng.gtefsd.com!emory!slammer!info-gw!  
aragorn@network.ucsd.edu  
Subject: cw waivers  
To: info-hams@ucsd.edu

> |>  
> |>  
> |>  
> |> Thanks & 73 | "Get your facts first, and then you can  
> |> Tom WI3P | distort them as much as you please."  
> |> collinst@esvax.dnet.dupont.com| Mark Twain  
> |> \*\*\* MY EMPLOYER DOESN'T SPEAK FOR ME NOR I FOR THEM \*\*\*  
>  
> Actually since W is not needed and it not any kind fo a reliable indicator of  
> technical or operating comptetance I say hurray. CW as a requirement should b  
> eliminated. It is an outmoded method of communication and is wrothwhile only  
> fun test of a particular skill. TI has no relavanve whatsoever to competence

> any other phase of the hobby. I say that it is jsut taking up too much of the  
> bands. MUCH more space should be allocated to the efficient digital modes suc  
> pactor and more communication could be carried out. Even hf packet would be m  
> better if all were not forced to operate on a very narrow range of frequencie  
> Come out of the dark ages and into the light.  
>  
>  
> gilbaronw@omnidelphi.com for e mail  
> "Bailar es vivir"  
>  
> RAISING FLAME SHIELDS NOW

So, what are you suggesting?? That there be no test at all??? If so, just go to CB and use it. 11 meters is HF after all! I'm not about to tell you that allocating more space to efficient digital methods is a bad suggestion, actually that's the only constructive piece I saw in your message, but doing away with testing would destroy amateur radio once and for all.

Chris Craig

KD4HDE

\s

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Information Gateway - Public Access Usenet and Email - +1 404-928-7873  
Please reply to: aragorn@info-gw.mese.com  
aragorn@info-gw.dragon.com  
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Date: Sun, 2 Jan 1994 10:08:05 MST  
From: library.ucla.edu!news.mic.ucla.edu!unixg.ubc.ca!nntp.cs.ubc.ca!alberta!ugc!  
nebulus!ve6mgs!usenet@network.ucsd.edu  
Subject: Daily Summary of Solar Geophysical Activity for 01 January  
To: info-hams@ucsd.edu

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

01 JANUARY, 1994

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(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 01 JANUARY, 1994

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NOTE: Intense stratospheric warming is persisting over central and northeastern Siberia, Alaska, and the Siberian and Canadian Arctic. Warming is slowly weakening. Temperature gradient is reversed between 60N and the pole in the middle and upper stratosphere from 30 HPA upwards.

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 001, 01/01/94  
10.7 FLUX=148.3 90-AVG=100 SSN=130 BKI=3234 3311 BAI=012  
BGND-XRAY=B7.9 FLU1=3.0E+05 FLU10=1.1E+04 PKI=3345 4322 PAI=022  
BOU-DEV=038,019,035,054,023,028,008,009 DEV-AVG=026 NT SWF=00:000  
XRAY-MAX= C4.4 @ 1745UT XRAY-MIN= B6.4 @ 1210UT XRAY-AVG= C1.1  
NEUTN-MAX= +002% @ 2335UT NEUTN-MIN= -002% @ 2340UT NEUTN-AVG= +0.0%  
PCA-MAX= +0.1DB @ 0850UT PCA-MIN= -0.9DB @ 2255UT PCA-AVG= -0.2DB  
BOUTF-MAX=55352NT @ 0003UT BOUTF-MIN=55326NT @ 1044UT BOUTF-AVG=55341NT  
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+042,+000,+000  
GOES6-MAX=P:+120NT@ 1527UT GOES6-MIN=N:-105NT@ 0647UT G6-AVG=+068,+035,-043  
FLUXFCST=STD:145,140,135;SESC:145,140,135 BAI/PAI-FCST=010,010,005/012,012,008  
KFCST=0223 4322 1223 4321 27DAY-AP=009,006 27DAY-KP=2123 3232 2112 2221  
WARNINGS=\*SWF;\*MAJFLR  
ALERTS=  
!!END-DATA!!

NOTE: The Effective Sunspot Number for 31 DEC 93 is not available.  
The Full Kp Indices for 31 DEC 93 are: 1o 3o 5o 5- 3- 3- 2- 2+

#### SYNOPSIS OF ACTIVITY

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Solar activity was low. Small flares and weak surging accompanied the limb transit of Region 7640 (N10W93). Occasional C-class flares occurred from Regions 7645 (N13E30), 7646 (S08E27), and 7647 (S14E20), as the focus of activity now shifts to the eastern hemisphere. Region 7645 is the largest and most complex spot group on the disk.

Solar activity forecast: solar activity is expected to be low to moderate.

The geomagnetic field was predominantly unsettled at mid-latitudes. High latitudes had stints of minor storm conditions during local nighttime hours.

Geophysical activity forecast: the geomagnetic field is expected to be unsettled to mildly active the next 48 hours. Quiet to unsettled conditions should end the interval.

Event probabilities 02 jan-04 jan

Class M	50/50/50
Class X	05/05/05
Proton	05/05/05
PCAF	Green

Geomagnetic activity probabilities 02 jan-04 jan

A. Middle Latitudes

Active	20/25/20
Minor Storm	20/10/10
Major-Severe Storm	01/01/01

B. High Latitudes

Active	20/20/20
Minor Storm	30/30/20
Major-Severe Storm	01/01/01

HF propagation conditions were near-normal to slightly below-normal for the first 3/4 of the UTC day over the low and middle latitude regions. Minor signal degradation was observed during the local night hours due to enhanced geomagnetic and auroral activity. Conditions were poor to occasionally very poor over the high and polar latitude paths, again attributed to the elevated levels of geophysical activity. Conditions over all regions recovered relatively quickly when geomagnetic and auroral activity subsided to quieter levels by the end of the day. Near-normal conditions should return to all regions on 02 and 03 January, with above-normal propagation possible over the lower and some middle latitude regions. Openings on higher bands near (or above) 10 meters should be observed for greater periods of time as the current level of solar flux continues to strengthen the ionosphere.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 01/2400Z JANUARY

NMBR	LOCATION	LO	AREA	Z	LL	NN	MAG	TYPE
7640	N10W93	207	0400	EKI	14	008	BETA-GAMMA	
7641	N06W88	202	0050	HSX	02	001	ALPHA	
7644	N12W83	197	0070	DSO	07	003	BETA	
7645	N13E30	084	0720	EKI	15	030	BETA-GAMMA-DELTA	
7646	S08E27	087	0430	DKI	10	022	BETA	

7647 S14E20 094 0080 CS0 06 006 BETA  
 REGIONS DUE TO RETURN 02 JANUARY TO 04 JANUARY  
 NMBR LAT LO  
 NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 01 JANUARY, 1994

-----  
 BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP  
 1834 1834 1835 110

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 01 JANUARY, 1994

-----  
 BEGIN MAX END LOCATION TYPE SIZE DUR II IV  
 01/ 0016 0158 0208 LDE C2.8 112  
 01/ 1540 1609 1649 LDE C2.0 69

INFERRED CORONAL HOLES. LOCATIONS VALID AT 01/2400Z

-----  
 ISOLATED HOLES AND POLAR EXTENSIONS  
 EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN  
 NO DATA AVAILABLE FOR ANALYSIS

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

-----  
 Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz  
 -----  
 31 Dec: 0041 0049 0051 C2.5 SF 7645 N13E49  
 0145 0149 0152 SF 7646 S09E55  
 0223 0229 0235 C2.1  
 0402 0407 0414 SF 7645 N11E45  
 0415 0420 0423 C4.8  
 0440 0449 0451 C4.0 1N 7645 N11E45  
 0515 0538 0551 C2.8 SF 7640 N08W70  
 0526 0536 0559 SF 7644 N12W54  
 0621 0626 0629 C3.2 SF 7645 N11E52  
 0632 0647 0653 C4.1 SF 7644 N12W55  
 0633 0638 0646 SF 7640 N07W70  
 0818 0820 0827 SF 7645 N12E47  
 0903 0905 0911 SF 7646 S08E50  
 1115 1122 1126 C2.1 SF 7640 N09W62  
 1138 1139 1146 SF 7645 N12E44  
 1439 1443 1445 C2.0 SF 7640 N09W69

1802	1804	1807		SF	7646	S10E44
1933	1939	1946	C1.7	SF	7640	N09W78
2232	2236	2238	C1.8	SF	7645	N12E40
2311	2311	2313		SF	7644	N10W81
2312	2313	A2325		SF	7640	N10W80

#### REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

	C	M	X	S	1	2	3	4	Total	(%)
Region 7640:	4	0	0	6	0	0	0	0	006	(28.6)
Region 7644:	1	0	0	3	0	0	0	0	003	(14.3)
Region 7645:	4	0	0	6	1	0	0	0	007	(33.3)
Region 7646:	0	0	0	3	0	0	0	0	003	(14.3)
Uncorrelated:	2	0	0	0	0	0	0	0	002	( 9.5)

Total Events: 021 optical and x-ray.

#### EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date	Begin	Max	End	Xray	Op	Region	Locn	Sweeps/Optical Observations
31 Dec:	0041	0049	0051	C2.5	SF	7645	N13E49	III
	1115	1122	1126	C2.1	SF	7640	N09W62	Continuum

#### NOTES:

All times are in Universal Time (UT). Characters preceding begin, max, and end times are defined as: B = Before, U = Uncertain, A = After. All times associated with x-ray flares (ex. flares which produce associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II	= Type II Sweep Frequency Event
III	= Type III Sweep
IV	= Type IV Sweep
V	= Type V Sweep
Continuum	= Continuum Radio Event
Loop	= Loop Prominence System,
Spray	= Limb Spray,
Surge	= Bright Limb Surge,
EPL	= Eruptive Prominence on the Limb.



\*\* End of Daily Report \*\*

-----  
Date: 2 Jan 1994 21:35:50 GMT  
From: swrinde!gatech!usenet.ufl.edu!mailer.acns.fsu.edu!freenet2.scri.fsu.edu!  
twright@network.ucsd.edu  
Subject: Finally got my license in the mail!  
To: info-hams@ucsd.edu

<SUSEEA@MAINE.MAINE.EDU> writes:  
> Took the Tech test and 5wpm code on OCT. 20, 1993 and recieved  
> the license on Dec. 24, 1993. Nice Christmas present I thought.  
> Just thought some of you out there would like to know the waiting  
> time.  
> Alan  
> N1QWT  
>  
> \*\*\* My son, 11 years old also passed his Tech with 5 wpm code. He  
> recieved his ticket the same day as me. N1QWV  
>  
> Now there are 3 generations of HAMS in this family.  
Man, that sure is a lot of bacon. 8-)  
Congrats to you and the Kid.

Tim Wright KD40VM

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Date: Sun, 02 Jan 94 17:40:50 GMT  
From: netcomsv!netcomsv!bongo!skyld!janguus@decwrl.dec.com  
Subject: TS-850 & ICOM SM-8  
To: info-hams@ucsd.edu

In article <6A231941C0E00911@snypotvx.bitnet>  
COLERK%snypotvx.BITNET@CUNYVM.CUNY.EDU writes:

> Greetings....I've been using the SM-8 microphone with my 850 for some time  
> now and really like how well it works..however, they "up/down" feature does  
> not work. I can get it to either go Up or Down but not both...cany anyone  
> help me? Keep it simple please, I'm no technician but I haven't blown my  
> self up yet either. 73....Roger

Call Icom on the phone and request the schematic to the SM-8. This will  
show you the pin connections on the 8-pin connectors and the up/down

buttons.

Call Kenwood on the phone and request the schematic for their Microphone. This will show you how the Up/Down function is implemented on their radio.

I assume you are asking because you do not have any documentation on either the radio or the microphone.

The Operators Manual for the TS-850 will cost about \$25. This beats the repair bill that will result from killing something inside the radio.

The Icom achieves up/down by pulling a single pin on the mic. connector either to ground or to ground through a 470 ohm resistor. The Kenwood uses 2 separate pins to select up or down.

73 es GM from Jeff

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA	"It is difficult to imagine our
Internet: jangus@skyld.tele.com	universe run by a single omni-
US Mail: PO Box 4425 Carson, CA 90749	potent god. I see it more as a
Phone: 1 (310) 324-6080	badly run corporation."

-----  
Date: 2 Jan 1994 20:52:34 GMT  
From: swrinde!cs.utexas.edu!howland.reston.ans.net!gatech!usenet.ufl.edu!  
mailer.acns.fsu.edu!freenet2.scri.fsu.edu!twright@network.ucsd.edu  
Subject: UK scanner listeners arrested; called  
To: info-hams@ucsd.edu

jmaynard@nyx10.cs.du.edu (Jay Maynard) writes:  
> In article <1993Dec29.131133.17917@hemlock.cray.com>,  
> David Adams <dadams@cray.com> wrote:  
> >There is something in all this that really bothers me about a system that  
> >would allow it's police force, those we hire to enforce laws dealing with  
> >honesty, to lie, to commit fraud, to do what ever beyond the law, in order  
> >to catch criminals,  
>  
> I don't have a problem with luring a fugitive in with whatever means, fair or  
> foul, they can come up with. Otherwise, we simply allow someone to evade  
> capture.  
>  
> > or even to persuade people to commit a crime so that  
> >they can be arrested.  
>

> This is entrapment, and I have real problems with that.  
>  
> >Sourdough and Ham AA0PV  
> > Cray Research Inc. packet: kg0io@tcman.#msp.mn.usa.noam  
>  
> Congratulations on the new call...now, shouldn't you reprogram your TNC? :-)  
> --  
> Jay Maynard, EMT-P, K5ZC, PP-ASEL | Never ascribe to malice that which can  
> jmaynard@oac.hsc.uth.tmc.edu | adequately be explained by stupidity.  
> "A good flame is fuel to warm the soul." -- Karl Denninger

Folks, its called a STING operation. No one told those people to show up.

Tim Wright KD40VM  
MSU Police  
--

-----  
Date: Sun, 2 Jan 1994 05:29:12 GMT  
From: usc!howland.reston.ans.net!spool.mu.edu!sgiblab!cs.uoregon.edu!efn!  
matt@network.ucsd.edu  
Subject: why 29.94 fps?  
To: info-hams@ucsd.edu

In <2fta02\$92e@crl2.crl.com> lreeves@crl.com (Les Reeves) writes:

>Okay.

>3.5795454545 MegaHertz is the colorburst frequency. It was defined in the  
>original design for "compatable color" and is cast in stone.

>So:

>3.5795454545 megaHertz / 455 = 7.867132866 kHz / 262.5 = 29.97003

I find it interesting that this colourburst frequency of 3.5795 MHz is right smack in the amateur radio 80 meter band. It seems that any and all ham operators can legally send morse code at that frequency at the legal power limit of 1 kilowatt output and screw up all of the colour tvs in the cities. How come this doesn't appear to be such a problem?

matt@efn.org n0gth  
-----

Date: 2 Jan 1994 21:39:22 GMT  
From: swrinde!elroy.jpl.nasa.gov!news.larc.nasa.gov!grissom.larc.nasa.gov!  
kludge@network.ucsd.edu  
To: info-hams@ucsd.edu

References <05FB8239@rhosoft.com>, <2fta02\$92e@crl2.crl.com>,  
<CIzLwp.7zJ@efn.org>m  
Subject : Re: why 29.94 fps?

In article <CIzLwp.7zJ@efn.org> matt@efn.org (M G Laubach) writes:  
>>3.5795454545 megaHertz / 455 = 7.867132866 kHz / 262.5 = 29.97003  
>  
>I find it interesting that this colourburst frequency of 3.5795  
>MHz is right smack in the amateur radio 80 meter band. It seems  
>that any and all ham operators can legally send morse code at that  
>frequency at the legal power limit of 1 killowatt output and screw up all of  
>the colour tvs in the cities. How come this doesn't appear to be  
>such a problem?

Primarily because there are so many TV sets spewing garbage out on that  
frequency that nobody would ever be heard if they were to use it. The  
advantage, though, is that you can tear the colorburst oscillator out of  
a TV set, and skew it a little bit up or down the band and have a nice  
QRP rig.

--scott

--

"C'est un Nagra. C'est suisse, et tres, tres precis."

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Date: Sun, 2 Jan 1994 17:42:20 GMT  
From: swrinde!emory!kd4nc!ke4zv!gary@network.ucsd.edu  
To: info-hams@ucsd.edu

References <757355523snx@skyld.tele.com>, <2g4blqINNs9j@network.ucsd.edu>,  
<1994Jan1.222239.629@bongo.tele.com>  
Reply-To : gary@ke4zv.atl.ga.us (Gary Coffman)  
Subject : Re: Looking for information

In article <1994Jan1.222239.629@bongo.tele.com> julian@bongo.tele.com (Julian  
Macassey) writes:  
>In article <2g4blqINNs9j@network.ucsd.edu> brian@nothing.ucsd.edu (Brian Kantor)  
writes:  
>>No, Jeff, most hams don't go to libraries or read books.  
>>Few of the public do either, whether hams or not.  
>  
> I once heard that 3% of the population had library cards. Then

>I read the 5% of the public buys books.

By and large they aren't the same people. Harold Robbins, Howard Stern, and Madonna capture most of the book buyers who aren't science fiction readers (the largest book purchase category). BTW the newspaper with the highest circulation isn't McPaper (USA Today), it's the National Enquirer. In essence, you can't underestimate the intelligence of the average reader; you can't imagine IQ numbers that low. But we know they can read, we can see their lips moving in the checkout line.

> I wonder what perecentage have VCRs and video rental cards.

Most of them have a VCR, but it always flashes 12:00, 12:00, 12:00 unless they have a child in the house who can set it for them. Thus we have VCR+ where you have to input an arbitrary sequence of digits instead of simply inputting that you want to record Ch 2 at 8pm. Not that it's going to work anyway, unless that child cabled it up for them.

> I know that many homes I visit have few or no books. I am alos  
>stunned by the number of radio amateurs that do not have any manuals  
>or handbooks on their favourite hobby.

Ah, you just hang out with the wrong class of people. Why I know  
\*several\* Hell's Angels with great (comic) book collections, and  
tons of motorcycle magazines. It must be true that radio amateurs  
don't read much, however, since QST, 73, and CQ don't have circulation  
figures of more than a fraction of licensed amateurs.

> Could the lack of literacy be related to the falling numbers  
>involved in participatory activities?

I don't know, can bowlers read?

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

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Date: 2 Jan 1994 16:33:42 -0800  
From: nntp.crl.com!crl2.crl.com!not-for-mail@decwrl.dec.com  
To: info-hams@ucsd.edu

References <2fta02\$92e@crl2.crl.com>, <CIzLwp.7zJ@efn.org>,

<2g7eua\$epl@reznor.larc.nasa.gov>com  
Subject : Re: why 29.94 fps?

Scott Dorsey (kludge@grissom.larc.nasa.gov) wrote:

: In article <CIzLwp.7zJ@efn.org> matt@efn.org (M G Laubach) writes:  
: >>3.5795454545 megaHertz / 455 = 7.867132866 kHz / 262.5 = 29.97003  
: >  
: >I find it interesting that this colourburst frequency of 3.5795  
: >MHz is right smack in the amateur radio 80 meter band. It seems  
: >that any and all ham operators can legally send morse code at that  
: >frequency at the legal power limit of 1 killowatt output and screw up all of  
: >the colour tvs in the cities. How come this doesn't appear to be  
: >such a problem?

: Primarily because there are so many TV sets spewing garbage out on that  
: frequency that nobody would ever be heard if they were to use it. The  
: advantage, though, is that you can tear the colorburst oscillator out of  
: a TV set, and skew it a little bit up or down the band and have a nice  
: QRP rig.

Actually, I have found just the opposite to be true.

The colorburst frequency is not only cast in stone-it is extremely accurate.  
It is more accurate as a frequency reference than WWV. This is provided  
that you are tuned to a network-supplied program.

If you try to receive 3.57954545 MHz near a TV, you will hear almost nothing.  
In fact, the only way to take advantage of the precision of the colorburst is  
to lock an oscillator to the 7.867 kHz signal radiated by the very strong  
magnetic deflection circuit.

I know about this first hand. I wish their \*were\* a bit of 3.57954545 MHz  
leakage from a TV; it would make calibrating a lot easier.

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End of Info-Hams Digest V93 #1534

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